

**INDICATORS OF EVOLUTION  
IN HOUSING POLICY  
IN HUNGARY, 1993-1998**

Prepared for



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## **INDICATORS OF EVOLUTION IN HOUSING POLICY IN HUNGARY, 1993-1998**

### **SUMMARY**

The United States Agency for International Development (USAID) has had a program of technical assistance to the Government of Hungary in the area of housing finance since 1992. In 1993, a set of Indicators was stated to measure the impacts of that program from 1993 to the end of the program. There were six indicators, all related to the efficiency and effectiveness of housing finance in Hungary. This report describes the Indicators, the methodology, and the results for 1998.

The approach of using quantifiable indicators of policy evolution is useful beyond the context of the transition. Indicators provide a framework for evaluating the extent to which reforms have met their stated goals. The process of formulating such Indicators also helps refine the choice and detailed design of policy changes when those changes are being formulated and implemented.

In summary, the Indicators confirm that Hungary has substantially improved the efficiency of its subsidy systems and the effectiveness of the housing finance sector. Despite this, policy evolution did not fully meet all of the stated goals:

It reduced loan subsidies overall by about 69 percent (somewhat less than the goal of 80 percent).

More of total housing subsidies were directed to the lower half of the income distribution, but less than the target of two-thirds and the expansion and concentration of the lump-sum grant assistance the Housing Construction Allowance (HCA) in 1995-1998 was distortive and wasteful.

Legal support for loan recovery has made tremendous strides, but the actual management of credit risk by OTP has not advanced significantly.

Finally, significant competition among commercial banks appeared in 1998, but the start-up of the "building society" system overshadows the positive prospects for market-based housing lending.

**Indicator 1: Loan Subsidies**

This indicator focuses on change in the degree to which subsidies are being channeled through the housing loan system. Loan subsidies are undesirable because they distort the form of financing housing purchases, expending national and governmental resources unnecessarily in contrast with more direct and efficient modes of delivering subsidies. The problem was particularly acute in Hungary from 1989 to 1993.

**Indicator 1:** The present value of the average amount of subsidy provided through subsidies of the mortgage payment, as a percentage of (a) the loan amount and (b) the house price. Separate indicators are to be calculated for loans for new houses, existing houses, rehabilitation, infrastructure hook-ups, and loans to localities for infrastructure. The goal is to reduce these subsidies on new loans *in the aggregate* by 80 percent.

Unfortunately, it is easy to make errors in measuring the trend in subsidies over time. For example, adding up such subsidies as reported in the budget each year is very misleading. Many subsidy policies have an impact on the budget for more than one year and the current budget figures reflect both past and current commitments. But it is the commitments made to subsidies in that year that affect the housing market and future budgets. In order to evaluate the subsidy policy in any particular year, it is necessary to find the present discounted value of the present and future budget commitments of loans made in the current year.

Having focused on this present discounted value, a further step is needed to avoid letting extraneous factors distort comparisons over time. The goal of the exercise is to assess the distortive effects of subsidy policy as practiced currently relative to the practice in an earlier year. Thus, the second step is to isolate the impact of government policy decisions, excluding unrelated shifts in the housing market. For example, new housing production hit a very low level in 1993. It is not fair to conclude that government policy after 1993 was providing more mortgage subsidies simply because more subsidies may be used at higher levels of new housing production.

In order to isolate the impact of policy changes alone, the approach here is to apply today's subsidy policies to 1993 housing activity levels and compare that with the actual provision of subsidies in 1993. How this is done is discussed in greater detail in Annex 1.

For 1993, it is estimated that the present value of subsidies on housing loans originated in that year was HUF 11.2 billion, which was 33 percent of total lending for housing and 7 percent of total activity in the housing market.

Taking 1993 levels of housing market activity and applying the subsidy rules and



subsidy usage in 1998, it is estimated that the present value of subsidies on housing loans under such rules would have been HUF 3.6 billion, or 10 percent of total lending in 1993. This implies a 69 percent reduction in loan-related subsidies.<sup>1</sup>

This sharp decline resulted from the major reforms of the housing subsidy system undertaken by the government in 1994. All loan subsidies were removed for purchase or rehabilitation of existing houses and for infrastructure hook-ups. The direct loan subsidies for new housing were reduced by about one-third, but some loan subsidies were redirected into tax deductions. These reforms have allowed the government to exercise greater control over its long-term budget commitments in this sector. They also contributed to a sharp decline in borrowing activity (but not housing activity), evidence of how loans (and all of the attendant expenses) were being undertaken primarily to access subsidies and not because they were absolutely necessary to buy or renovate a house.

Subsidy policy did not reach the goal of an 80 percent decline in loan subsidies because of the insistence on retaining large subsidies for loans made for new housing. While politically popular, these resources were probably largely wasted. This was because (1) there was a large increase in 1994 in lump-sum subsidies to new construction (see below) which reduced the incremental impact of loan subsidies and (2) half of the subsidy was converted into the form of a tax deduction, which is a far less visible and effective subsidy than (although just as expensive as) a direct loan subsidy.

### ***Indicator 2: Other Subsidies***

This indicator calls for tracking and assessing the desirability of subsidies that were not related to housing loans. If such subsidies are direct, transparent and targeted, they may constitute an effective form of social or economic policy. Thus, the indicator statement does not specify any target for reducing these subsidies, just that their nature and impact be

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<sup>1</sup> The reduction in actual subsidies from 1993 to 1997 was much larger, because the level of lending for new housing fell sharply. This decline in lending may have reflected the big increase in the lump-sum grants (Housing Construction Allowance) as well as the decrease in loan subsidy.

<sup>2</sup> This analysis leaves out the introduction of the Housing Savings Banks in 1997. These institutions offer subsidies to housing consumers, partly by providing a higher return on savings for housing and partly by offering below-market loans for housing. This omission reflects both large uncertainties about how to account for these subsidies and recognition that strong commercial pressures forced adoption of these subsidies over the objection of government policy makers.

analyzed.

**Indicator 2:** Analysis should be undertaken with respect to lump-sum subsidies (i.e., social policy allowance) and indirect subsidies (e.g., value-added tax (VAT) exclusion).

In 1993, there were a variety of subsidies provided by the central government and local governments, as well as employers, in addition to those related to *bona fide* loans.<sup>3</sup> These included (1) the Social Policy Allowance, (2) low-rate loans by local governments and employers, and (3) an exclusion of part of the cost of new housing construction from the value-added tax.

In 1993, the Social Policy Allowance (SPA) was a lump-sum subsidy with a magnitude that depended strongly on the number of children in the household. In concept, it was obtainable only once, so it could be viewed as being targeted to first-time homebuyers. However, because it was restricted to buyers of new housing, it was not so much assistance to young couples as it was an incentive for established households to buy or build a new house. Moreover, even after using the SPA once, further amounts could be taken when another new house was built, reflecting any increase over time due to inflation or adding children. A weak limitation also applied to the size and luxuriousness of the house.

The SPA ranked well with respect to transparency to the recipients, but not so well with respect to clarity of purpose and overall effectiveness. The subsidy was large only if the household had two or more children and bought a new house. Thus, the policy was simultaneously trying to encourage both population growth and the construction industry and also aid first-time homebuyers, to the detriment of its effectiveness in each respect.

In 1993, the allowance was worth HUF 200,000 (USD 2,200) for two children, or almost 6 percent of the cost of an average new house. While this amount is more than the down payment provided by many first-time buyers in the U.S., it was only a small part of the typical equity investment of over 60 percent in Hungary. In total, the amount of SPA taken by homebuyers in 1993 was HUF 3.4 billion, covering 4.7 percent of the total cost of new houses.

In late 1994, the SPA was renamed the HCA and modified to serve as a stimulus to greater housing construction. It was sharply increased to HUF 1.2 million (USD 10,000) for two children and HUF 2.2 million (USD 18,000) for three children. This led to such a large increase in usage that the restrictions were tightened in 1995 to truly limit it to people who had

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<sup>3</sup> The subsidies offered by employers and local governments took the form of long-term loans with a one percent or zero interest rate, in order not to be treated as taxable income. In the recent high inflation economy of Hungary, a zero-rate loan is nearly the same as a grant. Thus, these subsidized loans are treated here as grants.



not had a SPA before and also houses costing less than average. Thus, in 1998, it was primarily benefiting large, relatively lower income households living in rural areas, where few had bought a new house recently and construction was cheap (and fraud easier).

Was the shift to the HCA an improvement? It could be viewed as an improvement in an abstract way. Such direct grants are often described as the best type of subsidy, at least if targeted in a socially desirable way. It appears that most of the funds were going to relatively lower income households. But tying funds to building new housing is not a sensible way of assisting lower-income housing and the grant's large size was generating disproportionate waste. Much of the funds were either going to people who would have built a new house anyway or to large families who already had access to a good existing house. Moreover, the new houses were often in villages with an excess of housing already. The waste was likely compounded by extensive fraud engendered by the large stakes involved.<sup>4</sup>

Fortunately, the government allowed inflation to erode the damage being done by this subsidy, so that by 1998, the USD value of the HCA had declined to USD 6,000 (2 children) and USD 10,500 (3 children). Its distortive effects have diminished and it is acting more like the SPA did before, but with the improvement that no one who has had a SPA before can get the HCA. In fact, after 3 years of costing about HUF 30 billion a year, usage of the HCA fell sharply in 1998 and total expenditures were about HUF 20 billion.

Even at this lower level of usage, the budget burden of the HCA was still more than twice that of the SPA in 1993. However, at the same time the system of VAT-exemptions for housing was ended and at least some of those budget savings were supposed to be directed into the HCA. The VAT exemption was calculated to cost HUF 7.4 billion in 1993, which would translate into HUF 18 billion in 1998 HUF. It is possible to argue that, if the VAT system captured these savings, then in fact by 1998 the increase the HCA did not represent a net expansion in subsidy policy, but a redirection from general support for new housing and towards the family-size targeting criteria of the SPA. However, it is very unlikely that the full VAT revenue was realized in this traditionally "black" part of the economy.

The rise in the SPA/HCA and the end of the VAT rebate was, on net, probably a negative policy shift, because of the distortive targeting and extensive fraud.

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<sup>4</sup> The intent of concentrating so much subsidy on a relatively few people (families with 2 to 3 children) was to spur new construction. From this narrow perspective, boosting the subsidy to 50 percent or more of the cost of a house for certain people was probably an effective approach, but it also encouraged fraud and disregard for other social criteria (e.g., do these people need a new home?).

The *grants and loans from local governments* do not depend on the number of children or the purchase of a new house, and those with exceptional income or assets are discouraged from applying. Thus, they are a more sensible form of lump-sum grant assistance. The typical size was HUF 190,000 (USD 2,000) in 1993, almost as much as the SPA, but there were many fewer recipients and a disproportionate representation of purchasers of existing houses (and thus of those with truly more modest incomes). The total amount of such loans and grants reported by OTP for home purchase in 1993 was HUF 1.3 billion. In addition, another HUF 265 million went for renovation support.<sup>5</sup>

Paralleling the use of local government funds for assistance to homebuyers was the tradition of *employer loans*, usually provided at a 1 percent interest rate. These loans also were typically for about HUF 200,000 and for 10 years and were equally as available for existing units and for rehabilitation as for the construction of new houses. However, they were not targeted in any way and are mostly given in order to provide a tax-free fringe benefit. Total expenditures by employers through OTP in 1993 were HUF 3.4 billion, about as significant as the SPA. However, since these were loans, not grants (even though at a very low interest rate), their present value as grants was about 70 percent of the face amount.

This tradition of assistance by employers and local governments continued up to 1998, but the nominal value of the assistance did not keep up with inflation. The average interest-free loan from local government was HUF 280,000 in 1998, or only USD 1,300. (However, the average price of an existing house had also not kept up with inflation.) The average low-rate loan from employers was HUF 445,000, and appears to have kept up with inflation. Most importantly, in 1998 the total spent by local governments and employers was only HUF 1.5 billion, marking a more than 80 percent decline in real terms in such activity from the HUF 5.0 billion in 1993.

The drop in employer loans appears to be a significant positive, because they are unabashed tax avoidance with doubtful equity of distribution. However, the loans by local governments are reputed to be well targeted and thus their drop may be undesirable.

A major program to assist the *handicapped with modifications* to their homes to improve access and other aspects was also underway in 1993. The assistance was generally through a grant for a portion of the cost. These grants were usually administered through OTP. They averaged about HUF 130,000 and benefited about 7,000 households. Total expenditures in 1993 as reported by OTP were HUF 1 billion.

Evidently, the need for renovations for the handicapped declined after 1993 and the

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<sup>5</sup> However, this is probably an understatement of overall support, since local governments were able to make grants as well to those not getting loans for their house purchase (and thus not included by OTP).





size of grant stayed constant in HUF. In 1998, only about 2,000 such grants were made, still averaging HUF 130,000, for a total of HUF 289 million.

Since 1989, a VAT was applied at increasing rates and with wider coverage to provide the basic tax revenues of the central government. Until 1993, housing construction remained exempt from the VAT; a provision implemented through a process of refunding to the owner the portion of the price of construction materials that reflected the tax. In 1993, the *exemption from VAT* was limited to the first 60 percent or HUF 400,000 of tax. There were approximately 21,000 houses eligible for this refund in 1993, for an estimated ultimate subsidy of HUF 7.4 billion, or about 10 percent of the total cost of these houses.

Since the exemption was subject to an overall cap of HUF 400,000 in 1993, this provision generally did not encourage building a bigger house and thus was relatively less distortive and more in tune with the social objective of encouraging more housing production, not size. But the social value of encouraging greater housing construction in general was debatable. In 1995, this subsidy to housing construction was subsumed under the HCA, and in this form was even less desirable, given the distortive fashion in the HCA was targeted.

In 1993, the present value of all such lump-sum subsidies for home purchase, renovation, and infrastructure hook-ups was estimated to be HUF 16.8 billion, or 10.2 percent of total activity in the housing market. In 1998, the estimated value of non-loan subsidies was HUF 24.2 billion, almost a 40 percent decline in real terms and, because of the real increase in market activity, less than 6.0 percent of total market activity.

### ***Indicator 3: Distribution by Income***

It is not generally considered to be a good policy for a government to pursue housing policies that subsidize the housing of most of the population. Instead, it is considered desirable to offer subsidies that channel into housing some of the social welfare assistance that is going to the relatively poor. In other words, housing subsidies ought to be oriented towards those with less-than-average incomes. Thus, the Indicators included an assessment of how focused the subsidies are on the lower half of the income distribution.

**Indicator 3:** The percentage distribution of different types of home purchase subsidies by income level of the recipient should be estimated, both on the basis of household income and on household income per family member. The goal is to focus more than 66 percent of the present value of subsidies on the lowest half of the income distribution of homebuyers.

Several aspects of this indicator should be noted. First, it is focused on policy with respect to finance for home purchase, so only the subsidies to this sector, and not rehab or infrastructure, are to be analyzed. Second, the recipients of home purchase subsidies are to be stratified by both total income and income per household member. The latter introduces an adjustment both for the cost of living for larger households and for the higher demand for living space of such households.<sup>6</sup> Third, it is the population of homebuyers that is being considered, which group has higher incomes in general.

Indicator 3 speaks to a specific degree of targeting of all types of home purchase subsidies. However, there are no data capable of even approximating the distribution by income of the full array of subsidies measured in Indicators 1 and 2. Despite the absence of hard data, it is possible to analyze the general level and trend in targeting. That is because each of the subsidies has a peculiar pattern of eligibility and use that may be qualitatively indicative of its targeting. Unless the qualitative trends in targeting are strongly conflicting, the overall trend in distribution should be discernible.

In 1993, the single most important subsidy was the partial exemption from the VAT. The limit on the exemption was set not far below the average amount of expenditures on materials for a new house. If the median is not very different from the mean house value, then roughly 60 percent of the new home buyers got a subsidy of HUF 400,000 and the other 40 percent (which includes primarily relatively lower income buyers) got one less than HUF 400,000. Assuming that house value is proportional to income, then the bottom half of the income distribution *among new homebuyers* probably got only 45 percent of the subsidy. Moreover, buyers of new homes as a group tend to have even higher income than simply homebuyers in general. As a guess, maybe only 30 percent of the VAT rebate went to the bottom half of the income distribution of homebuyers.

The deep interest subsidy and the SPA subsidy were also only for new homes and thus might be expected to be largely directed to an upper-middle income group (but not concentrated at the top because of the luxury limits on eligibility). However, there is some small amount of data from OTP files (300 cases) that suggest that these subsidies are actually more focused on the lower two-thirds of the market of homebuyers. Apparently because the upper third consists more of people with high incomes who are able to buy without these subsidies and with small families (maybe in middle-age) who do not qualify for deep subsidies. In other words, the more marginal buyers, who have the children still resident or need the subsidy to buy, are in the relatively lower income groups. Thus, it will be counted that two-thirds of these benefits went to the lowest one-half.

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<sup>6</sup> Simply putting all items on a per person basis is far too much of an adjustment, given the evidence that living costs and housing consumption increase much less than proportionately with household size. However, per person calculations were traditional under the centrally planned system and thus are an existing practice.



The other subsidies, those from local governments and employers and for the shallow-subsidy loans, were not exclusively for buyers of new homes and were distributed between buyers of used and new homes in nearly the same proportion (1.9 times) as were the numbers of such buyers to each other (2.5 times). The data from OTP files indicate that employers give more money to high-income households, while local governments, as supposed, target their assistance, especially in the form of grants, to the lower income households among the buyers. The net effect is to distribute the benefits evenly by income. However, the shallow subsidy loans are much larger to the upper-income group, because they can afford the higher repayments on this type of funding. We conclude that the lower half by income received only 40 percent of this subsidy.

This analysis suggests that, for 1993, the distribution of these subsidies to the bottom half by income can be approximated as the following. Only about 30 percent of the HUF 7.4 billion in VAT rebates went to the bottom half. Of the HUF 6.0 billion in special subsidies for new houses other than the VAT exemption, two-thirds went to the bottom half. Another HUF 5.1 billion in subsidies is distributed evenly over all home buyers, with one-half going to the bottom half, and only 40 percent of the HUF 3.0 billion in shallow subsidy on loans went to the bottom half.<sup>7</sup> *That implies a distribution of HUF 10 billion or 47 percent of the total home-purchase subsidies going to the bottom half.* While not that far from a uniform distribution, this result suggests a long distance to go before having 66 percent of the subsidy targeted to this portion of the market.

Putting this calculation on a per person basis would shift the subsidy a bit towards the lower half because the SPA is significant only for families of 4 or more.

There is no better information for 1998 as to the distribution of the subsidies. But the types of subsidies had changed significantly. The SPA and VAT exemption had been replaced by the Housing Construction Allowance, which had even a greater tilt towards large families. Moreover, the HCA was disproportionately used in rural areas, because of the combination of large families and lower housing costs. Thus, the distribution of the HCA was probably at least half to households in the bottom half by family income and more than two-thirds to the bottom half as measured by income per family member.

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<sup>7</sup> This leaves HUF 0.4 billion unaccounted for. These subsidies were related to the sales of existing houses bought by construction companies from people buying new houses. It appears that the value of these new-house subsidies being made available to these existing units is captured by the construction company, which can charge a higher price for these used houses or its new houses. Thus, these subsidies are not ascribed as a benefit to any homebuyers.

The HCA was HUF 20 billion of the estimated total of HUF 24 billion in subsidies in 1998. The next largest subsidy was HUF 1.4 billion for loans on new houses, which could be expected to be distributed as in 1993, with two-thirds of the subsidy going to households in the bottom half. The only other significant subsidy, for HUF 1.0 billion, was in the form of low-rate loans to employees, which tends to be disproportionately to higher income households.

The implication is that it is likely that by 1998 over half, but less than two-thirds, of the subsidies were directed to lower-half households. However, because almost all of the HCA went to households with 3-5 members, it is highly likely that over two-thirds of the subsidies went to those households ranked in the bottom half by income per capita. This increase in targeting can be viewed as being desirable, but the increase in the HCA brought with it a decline in the ratio of benefit relative to cost, since the cost rose significantly and the benefits from greater housing production were probably very small.

#### ***Indicator 4: Recovery in Case of Default***

A market-based housing finance system places three primary risks as a lender: interest rate risk, liquidity risk, and credit risk. Credit risk, that with respect to timely repayment, was noted in 1993 as the major obstacle to the entrance of additional lenders into the housing finance market in Hungary. Thus, an Indicator was included covering progress in this politically sensitive area.

**Indicator 4:** A compilation of specific actions designed to decrease the difficulty of ultimately recovering amounts due under mortgages. The goal is to be able to trace a procedure that with a high degree of certainty and within three years of default leads to recovery of losses incurred by a lender.

The credit recovery situation was in a state of suspended animation in 1993. Previous to then, OTP had garnished the wages of any delinquent borrower. However, the courts held in June 1992 that OTP could not do that without the permission of the employee. That left mortgage lenders only the right to seek recovery through enforcement of the mortgage itself. But the impossibility of effective eviction even after a lengthy foreclosure left housing lenders powerless to enforce the mortgage indenture. At the beginning of 1993, housing lenders essentially had no effective recourse in the case of default on the part of mortgage borrowers.

Since then, Hungary has adopted a number of progressive new laws to facilitate recovery of housing loans. As a result of recent changes in the legal framework, Hungary stands at the forefront of countries in Eastern and Central Europe in establishing the requisite legal tools for securing real estate loans and assuring expeditious access to collateral in the event of default in a mortgage loan. For example:



The 1993 Law on Regulation of Rent and Sale of Housing exempts private landlords from the requirement of providing alternative housing to an evicted tenant.

Amendments to the Civil Code sections on mortgages and liens adopted in 1996 and a 1994 law on court procedures permit foreclosure and repossession without the lengthy judicial proceedings required under previous law.

The Civil Code now permits the lender to sell the property itself without court intervention if the parties so agreed in the loan documents.

Civil Code amendments provide that for residential real estate, the parties may agree that the borrower must deliver the property empty of occupants in the event of foreclosure.

The 1997 Law on Mortgage Banks and Mortgage Bonds changed the priority for payment to a mortgage lender from the proceeds of a foreclosure sale from last place to fourth place, ahead of taxes, social security, and other public debt.

This extensive legal support structure has not been substantively tested in concrete instances. Thus, it is unclear whether the goal of a three-year horizon can be met. Moreover, these significant developments do not seem to have made a substantial difference in actual real estate lending and recovery practices used by Hungarian banks. Some bankers believe other remedies, such as renegotiating loan terms or seeking payment from guarantors, are preferable because they are less problematic, even if they are insufficiently effective. In addition, non-judicial foreclosure is available only if the loan documents are notarized, and this procedure is quite expensive.

However, the tools now exist to assure banks, and threaten defaulters, that foreclosure sale and eviction are relatively imminent and certain. So far, the current low level of demand for mortgage credits and the continuing lack of competition among banks have stymied efforts to establish a new perception among banks and the public in this regard. This is an important missing step, since it is only when these perceptions change that the management of delinquencies will become more professional and the risk premium on lending will shrink.

### ***Indicator 5: Loan Delinquencies***

It was hoped that the effect of the reformed loan recovery procedures on delinquency management could be measured directly by looking at the delinquency rates at OTP. Indicator 5 was looking toward a reduction in these rates to levels similar to those in the U.S. and



Western Europe.

**Indicator 5:** Delinquency data for OTP for loans originated three years earlier, delinquent for 90 days, 180 days, and one year. The goal is to see the delinquencies beyond one-year decline by 75 percent comparing the periods prior to and after 1994.

Indicator 5 is structured to focus on loans that have been outstanding long enough to exhibit underlying recovery problems and to avoid mixing in loans of a variety of longevity's. The year of issuance for the 1993 analysis was 1990, three years earlier. For 1998, the year of issuance is 1995. This lag means that improvements in credit screening and default management undertaken after 1993 may not become evident immediately, but this focus on seasoned loans is necessary for the default situation to be measured accurately.

As of December 1993, the loans made by OTP in 1990 had the following rates of delinquency:

	Number of Loans (in Percent)	Share of Principal (in Percent)
Over 90 days:	8.2	11.7
Over 180 days:	6.3	9.8
Over 1 year:	4.5	7.7

The data above was compiled by OTP through special programming efforts, since OTP did not track delinquencies by year of loan origination. OTP still does not track delinquencies by year of loan origination and special programming assistance is not available today. However, the data on delinquencies for through December 1997 *on all loans made after 1993* were made available and have been analyzed for indications of comparable figures. Basically, adjustments were made for the low delinquencies to be expected on loans that were made recently (e.g., since 1995) in order to estimate the rates on loans made in 1994 and 1995.

Careful analysis of the data and extrapolation of the trends to 1998 *strongly suggest that OTP has not made any improvement in its delinquency situation with respect to new cohorts of loans*. In other words, if delinquency data was broken out according to just loans made in 1995 as of the end of 1998, it appears likely that the results would be similar to the table above.

As noted above, the banking community has not been aggressive about utilizing the full range of tools available to them under the new laws. An analysis of a sample of defaulted OTP loans confirms that the bank did not start legal procedures to foreclose on the property



for an average of over 2 years after default. In contrast, the normal approach of Western lenders is to start legal procedures after 90 days of delinquency and pursue them in parallel with continuing efforts to reschedule or reach some other amicable conclusion. Given how much more rapidly interest arrearages are rising than is the value of the property (at current interest rates and low value appreciation). This approach seems needed in Hungary if recoveries are to be maximized and default rates are to be brought down (through recognition that a voluntary sale is preferable to rapid foreclosure).

### ***Indicator 6: Evolution of the Housing Finance System***

Lastly, there is a section on general developments in the sector.

**Indicator 6:** An array of indicators of the evolution of the housing finance system, including the entry of additional lenders, OTP's share of overall mortgage lending, the presence of capacity to resell mortgages or originate mortgage-backed securities, and the presence of institutional funding for mortgage lending.

Indicator 6 specifies four aspects of the institutional structure, but is open-ended with respect to additional developments. It should be noted that not every institutional development would be assessed as an improvement. For example, if excessive or inappropriate subsidy is introduced to support an institutional development, such a development may be viewed as counter-productive.

In 1993 there were only two sources of housing finance available to the general public, OTP and the system of 257 small savings cooperatives. These institutions primarily served different markets and thus did not compete with each other to any meaningful extent. The best data available indicate that OTP made about 90 percent of all the housing-related loans in 1993.

Despite repeated statements by some other banks of interest in making loans for housing, no additional banks actually made the major investment required to enter this market until 1997. In 1997, a major bank, K&H Bank, went public with an initial product, meant partially as an exploratory vehicle. It offered only a limited range of loans, only for a maximum term of 8 years, and not with any subsidy terms (i.e., not for new housing). However, the rates were somewhat lower than OTP's.

During 1997, K&H made 337 such loans, for a total of HUF 307 million. While this amount would not have registered at all in 1993, in the much shrunken market of 1997, this

was about 11 percent of the volume of loans made for existing houses, aside from loans tied to youth contract savings. In 1998, K&H made over 500 more loans for HUF 1.0 million each on average. In addition, Postabank started to offer housing loans, completing about 270 transactions. This is a significant amount of non-OTP lending and a recent escalation in OTP marketing efforts may indicate that the fruits of competition may not be too far in the future.

Elsewhere on the positive side has been the finalization of laws and regulations supporting mortgage banks. The first such bank, Land and Mortgage Bank, is planning to attempt to enter the housing loan market soon. Although it is unlikely that the mortgage banking will be very competitive with commercial banks (or building societies) in the near term (at least with subsidy), the legal potential may be useful at some future time when the bond market is better developed. Alternatively, there may be rising pressure to subsidize the sector, which would be a major negative.

The other major development since 1993 is the appearance of 4 new housing lenders under the new contract-savings scheme. These "building societies" will not themselves make many loans until the first savings contracts mature in 2001, but at that point they may largely replace the commercial banks, including OTP, as the major lenders for housing. Thus, ironically, the prospect is for the competition issue to be defused by the rise of a new, subsidized lending system. (Moreover, the building societies operate in such a way as to insulate themselves from price competition.)

The appearance of the building society system is in fact an unmitigated negative to the efficiency of both housing lending and subsidies in Hungary. (They were adopted against the advice of USAID's technical assistance and with extensive pressure from commercial interests.) The background on these institutions and their inappropriateness is detailed in a separate report prepared on the adoption of such systems throughout Central Europe.<sup>8</sup>

One other significant aspect of the market was the absence of additional government involvement in guaranteeing repayment of mortgages. The government is carrying such a guarantee on 80 percent of the principal on most loans made before 1993 and on loans eligible for the 4-3-1 subsidy since 1993, but suggestions to consider expanding such shifting of credit to the government were not pursued. Hopefully, the issue is dead, in light of the inadvisability of a government attempting to deal with defaulted loans when private banks do not even feel strong enough to take aggressive action.

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<sup>8</sup> "The Current Operation of the Bauspar Systems in the Czech Republic, Hungary, and Slovakia," by Douglas B. Diamond, September 1998.



## **ANNEX 1**

### **CALCULATING INDICATOR 1 TRENDS IN LOAN SUBSIDY POLICY**

This Annex describes the steps involved in tracking the impact of subsidy policy decisions in isolation from other shifts in the market. This methodology is applied to the calculation of Indicator 1, but could be applied in general to measuring the impacts of shifts in other subsidy policies.

There are two principal complications measuring such impacts. The change in the amount of subsidy as reflected in the budget can be very misleading because many subsidy policies impact the budget for more than one year and the current budget figure reflects a mix of past and current commitments, but does not reflect future commitments. The solution to this is to find the present discounted value of the present and future budget outlays for subsidy commitments made in the current year.

The second step is to isolate the impact of government policy decisions, excluding unrelated shifts in the market. For example, new housing production hit a very low level in 1993. It is not fair to conclude that government policy after 1993 was providing more mortgage subsidies simply because more subsidies may be used at higher levels of new housing production. Instead, the approach here applies the reformed subsidy policy to 1993 housing activity levels and compares that with the actual provision of subsidies in 1993.

#### **Value of Subsidies in 1993**

The amount of lending in 1993 is known for each type of housing investment. Because the OTP data followed the classifications used for determining subsidy amounts, it is relatively straightforward to determine the total subsidy amounts committed in 1993. The first step is to calculate the present value of each type of subsidy offered in 1993. This can be done by analyzing the expected cash flow of each subsidy and to applying a relevant discount rate to that cash flow.

For our work, we have set the discount rate at the interest rate applicable to most OTP housing loans in 1993, or 28 percent. (The rate since then has in fact averaged about this figure, although it is now expected to go down in the future.) The resulting figure has been entered into the column marked "Present Value" in the form of a ratio of the present value of the subsidy on HUF 1,000 of a loan of that type over HUF 1,000. Thus, in the case of the repayment subsidy for a loan for a new house taken out by a family with two children (70 to 35 percent to 15 percent declining subsidy rates), the present value was 62.1 percent of the loan amount. This figure multiplied by the amount of that type of loan made by OTP in 1993 is the present value of subsidy commitment made of that type in 1993.

**TABLE A-1**  
**Calculations for Indicator 1 for New Housing in 1993**

<b>New Housing</b>	<b>Amount of Lending (Million HUF)</b>	<b>Present Value of Subsidy per HUF</b>	<b>Subsidy (Million HUF)</b>
Deep Subsidy <sup>9</sup>	4,193.06	0.621	2,603.89
Shallow Subsidy	2,783.30	0.266	740.36
Youth Subsidy	819.93	0.632	518.20
No Subsidy	103.85	—	—
Total Loans for New Housing by OTP	7,900.14		3,862.45
Adjusted for Co-ops <sup>10</sup>	1.10		1.10
Grand Total New	8,690.16		4,248.69
Ratio of Subsidies to Loans			0.489
Ratio of Subsidies to New Housing Activity			0.059

Similar tables were constructed for lending for existing houses, for renovations, and for infrastructure hook-ups. These amounts of subsidy commitments were then added up across all types of lending and the ratios of these subsidies to the overall level of lending and to overall housing market activity were calculated.

The overall amount of subsidy commitments was about HUF 11.2 billion. As a share of the total lending by OTP and the Co-ops of HUF 35 billion, subsidies were 32 percent of loans. This figure indicates how deeply the government was subsidizing housing loans from 1989 to 1993. However, this subsidy amount was only about 7 percent of the HUF 166 billion in total housing market activity (home construction, purchase, and renovation), because loan amounts were limited and most housing investment was financed out of cash savings and existing home equity.

### **Value of Subsidies in 1998**

The conceptual goal is to isolate the effects of the changes in subsidy policy on the budget and the markets for housing and housing finance. Thus, the calculation for 1998 assumes no changes in the actual lending and market activity, using the figures for 1993 but applying the subsidy policies in place in 1998.

In the case of new housing, there was only one type of subsidy, but the value of that subsidy depended on whether the loan was a DPM or a regular annuity type loan. The total lending for new housing in 1993 was divided into DPM and annuity according to the actual ratio of these loans in 1998 and then these hypothetical lending amounts were multiplied by the present value of the 1998 subsidies for the DPM and the annuity. The subsidies in 1998

<sup>9</sup> Assumes that the borrower has two eligible children.

<sup>10</sup> A further adjustment is made to account for the fact that the Co-operatives are estimated to have about 10 percent of the market. Nothing is known about the amounts of each type of loan made by the Co-ops, and the assumption is made that they mirror the lending by OTP.

were (1) a 4-3-1 percentage point reduction in interest rate, with a drop every 5 years and (2) the reduction of personal taxes due by 20 percent of the repayment amount.

**TABLE A-2**  
**Calculations for Indicator 1 for New Housing in 1998**

<b>New Housing (Projection on 1993 of 1998 subsidies)</b>	<b>Amount of Lending (Million HUF)</b>	<b>Present Value of Subsidy per HUF</b>	<b>Subsidy (Million HUF)</b>
Projected Subs. DPM	3,359.21	0.416	1,397.34
Projected Subs. Annuity	3,617.15	0.307	1,110.46
Projected Youth (Same)	819.93	0.632	518.20
Projected Non-subs. (Same)	103.85	—	—
 Total Loans for New Housing by OTP	 7,900.14		 3,026.09
Adj. For Co-ops	1.10		1.10
Grand Total New	8,690.16		3,414.47
 Ratio of Subsidies to Loans			 0.383
Ratio of Subsidies to New Housing Activity			0.046

Based on these calculations and similar ones for purchases of existing housing, renovations, and hook-ups, the projected figures for subsidies as a percent of lending and of housing activity can be computed.

These show a dramatic decline in subsidy due to the elimination of most subsidies for existing housing, renovations, and hook-ups. However, the fact that the subsidies for new housing were reduced by only 20 percent kept the decline in overall loan subsidies from being in excess of 80 percent.

**TABLE A-3**  
**1998 Subsidies Projected on 1993 compared with 1993 Policies**

<b>Type of Housing Activity</b>	<b>Amount of Activity (1993, Million HUF)</b>	<b>Decline in Subsidy from 1993 to 1998 (in Percent)</b>
New Housing	72.3	19.7
Existing Housing	61.1	94.4
Renovations	25.5	99.0
Infra. Hook-Ups	6.8	100.0
TOTAL	165.7	68.7